OIPE

RAW SEQUENCE LISTING   DATE: 07/24/2001
PATENT APPLICATION: **US/09/893,348**   TIME: 11:23:45

Input Set : **A:\EIS-SCHWARTZ2A.txt**
Output Set: **N:\CRF3\07242001\I893348.raw**

ENTERED

```
 3 <110> APPLICANT: EISENBACH-SCHWARTZ, Michal
 4        COHEN, Irun R.
 5        BESERMAN, Pierre
 6        MOSONEGO, Alon
 7        MOALEM, Gila
 9 <120> TITLE OF INVENTION: ACTIVATED T-CELLS, NERVOUS SYSTEM-SPECIFIC ANTIGENS AND
THEIR USES
11 <130> FILE REFERENCE: EIS-SCHWARTZ=2A
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/893,348
C--> 13 <141> CURRENT FILING DATE: 2001-06-28
13 <150> PRIOR APPLICATION NUMBER: US 09/314,161
14 <151> PRIOR FILING DATE: 1999-05-19
16 <150> PRIOR APPLICATION NUMBER: US 09/218,277
17 <151> PRIOR FILING DATE: 1998-12-22
19 <150> PRIOR APPLICATION NUMBER: PCT/US98/14715
20 <151> PRIOR FILING DATE: 1998-07-21
22 <150> PRIOR APPLICATION NUMBER: IL 124500
23 <151> PRIOR FILING DATE: 1998-05-19
25 <160> NUMBER OF SEQ ID NOS: 29
27 <170> SOFTWARE: PatentIn version 3.1
29 <210> SEQ ID NO: 1
30 <211> LENGTH: 612
31 <212> TYPE: DNA
32 <213> ORGANISM: Homo sapiens
34 <400> SEQUENCE: 1
35 ccaagaagat cccacagcag cttccgaagg cctggatgtg atggcatcac agaagagacc    60
37 ctcacagcga cacggatcca agtacttggc cacagcaagt accatggacc atgcccggca   120
39 tggcttcctc ccaaggcaca gagacacggg catccttgac tccatcgggc gcttctttag   180
41 cggtgacagg ggtgcgccca agcggggctc tggcaaggac tcacacacaa gaactaccca   240
43 ctacggctcc ctgccccaga agtcgcagag acccaagat gaaaacccag tagtccactt   300
45 cttcaagaac attgtgacac ctcgtacacc ccctccatcc caaggaaagg ggagaggcct   360
47 gtccctcagc agatttagct ggggaggaag agacagccgc tctggatctc ccatggcaag   420
49 acgctgagag cctccctgct cagccttccc gaatcctgcc ctcggcttct taatataact   480
51 gccttaaacg tttaattcta cttgcaccaa atagctagtt agagcagacc ctctcttaat   540
53 cccgtggggc tgtgaacgcg gcgggccagc ccacggcacc ctgactggct aaaactgttt   600
55 gtcccttttt at                                                       612
58 <210> SEQ ID NO: 2
59 <211> LENGTH: 2139
60 <212> TYPE: DNA
61 <213> ORGANISM: Homo sapiens
63 <400> SEQUENCE: 2
64 gaaaacagtg cagccacctc cgagagcctg gatgtgatgg cgtcacagaa gagaccctcc    60
66 cagaggcacg gatccaagta cctggccaca gcaagtacca tggaccatgc caggcatggc   120
68 ttcctcccaa ggcacagaga cacgggcatc cttgactcca tcgggcgctt ctttggcggt   180
70 gacaggggtg cgccaaagcg gggctctggc aaggactcac accacccggc aagaactgct   240
72 cactatggct ccctgcccca gaagtcacac ggccggaccc aagatgaaaa ccccgtagtc   300
74 cacttcttca agaacattgt gacgcctcgc acaccacccc cgtcgcaggg aaagggggaga   360
76 ggactgtccc tgagcagatt tagctggggg gccgaaggcc agagaccagg atttggctac   420
```

RAW SEQUENCE LISTING
DATE: 07/24/2001
PATENT APPLICATION: US/09/893,348
TIME: 11:23:45

Input Set : **A:\EIS-SCHWARTZ2A.txt**
Output Set: **N:\CRF3\07242001\I893348.raw**

```
 78 ggaggcagag cgtccgacta taaatcggct cacaagggat tcaagggagt cgatgcccag    480
 80 ggcacgcttt ccaaaatttt taagctggga ggaagagata gtcgctctgg atcacccatg    540
 82 gctagacgct gaaaacccac ctggttccgg aatcctgtcc tcagcttctt aatataactg    600
 84 ccttaaaact ttaatcccac ttgcccctgt tacctaatta gagcagatga cccctcccct    660
 86 aatgcctgcg gagttgtgca cgtagtaggg tcaggccacg gcagcctacc ggcaatttcc    720
 88 ggccaacagt taaatgagaa catgaaaaca gaaacggtt aaaactgtcc ctttctgtgt     780
 90 gaagatcacg ttccttcccc cgcaatgtgc ccccagacgc acgtgggtct tcaggggggcc   840
 92 aggtgcacag acgtccctcc acgttcaccc ctccacccctt ggactttctt ttcgccgtgg   900
 94 ctcggcaccc ttgcgctttt gctggtcact gccatggagg cacacagctg cagagacaga    960
 96 gaggacgtgg gcggcagaga ggactgttga catccaagct tcctttgttt ttttttcctg   1020
 98 tccttctctc acctcctaaa gtagacttca tttttcctaa caggattaga cagtcaagga   1080
100 gtggcttact acatgtggga gctttttggt atgtgacatg cgggctgggc agctgttaga   1140
102 gtccaacgtg gggcagcaca gagaggggggc cacctcccca ggccgtggct gcccacacac   1200
104 cccaattagc tgaattcgcg tgtggcagag ggaggaaaag gaggcaaacg tgggctgggc   1260
106 aatggcctca cataggaaac agggtcttcc tggagatttg gtgatggaga tgtcaagcag   1320
108 gtggcctctg gacgtcaccg ttgccctgca tggtggcccc agagcagcct ctatgaacaa   1380
110 cctcgtttcc aaaccacagc ccacagccgg agagtccagg aagacttgcg cactcagagc   1440
112 agaaggggtag gagtcctcta gacagcctcg cagccgcgcc agtcgcccat agacactggc   1500
114 tgtgaccggg cgtgctggca gcggcagtgc acagtggcca gcactaaccc tccctgagaa   1560
116 gataaccggc tcattcactt cctcccagaa gacgcgtggt agcgagtagg cacaggcgtg   1620
118 cacctgctcc cgaattactc accgagacac acgggctgag cagacggccc ctgtgatgga   1680
120 gacaaagagc tcttctgacc atatccttct taacacccgc tggcatctcc tttcgcgcct   1740
122 ccctccctaa cctactgacc caccttttga ttttagcgca cctgtgattg ataggccttc   1800
124 caaagagtcc cacgctggca tcaccctccc cgaggacgga gatgaggagt agtcagcgtg   1860
126 atgccaaaac gcgtcttctt aatccaattc taattctgaa tgtttcgtgt gggcttaata   1920
128 ccatgtctat taatatatag cctcgatgat gagagagtta caaagaacaa aactccagac   1980
130 acaaacctcc aaatttttca gcagaagcac tctgcgtcgc tgagctgagg tcggctctgc   2040
132 gatccatacg tggccgcacc cacacagcac gtgctgtgac gatggctgaa cggaaagtgt   2100
134 acactgttcc tgaatattga aataaaacaa taaactttt                          2139
137 <210> SEQ ID NO: 3
138 <211> LENGTH: 581
139 <212> TYPE: DNA
140 <213> ORGANISM: Homo sapiens
142 <400> SEQUENCE: 3
143 taatatctag ggktttgact ctgacccgtg ttggggctct cacttcatgg cttctcacgc     60
145 ttgtgctgca tatcccacac caattagacc caaggatcag ttggaagttt ccaggacatc    120
147 ttcattttat ttccaccctc aatccacatt tccagatgtc tctgcagcaa agcgaaattc    180
149 caggcaagcc ttagggaaaa aaggaaaaac aaagaaaatg aaacaattgg cagtgaaagg    240
151 cagaaagaga agatggagcc cttagagaag ggagtatccc tgagtaggtg gggaaaaggg    300
153 gaggagaagg ggaggaggag aggaggagga aagcaggcct gtcccttttaa gggggttggc    360
155 tgtcaatcag aaagcccttt tcattgcagg agaagaggac aaagatactc agagagaaaa    420
157 agtaaaagac cgaagaagga ggctggagag accaggatcc ttccagctga acaaagtcag    480
159 ccacaaagca gactagccag ccggctacaa ttggagtcag agtcccaaag acatgggtaa    540
161 gtttcaaaaa ctttagcatt gaagattcaa gaggacacag g                       581
164 <210> SEQ ID NO: 4
165 <211> LENGTH: 1762
166 <212> TYPE: DNA
167 <213> ORGANISM: Homo sapiens
169 <400> SEQUENCE: 4
```

RAW SEQUENCE LISTING   DATE: 07/24/2001
PATENT APPLICATION: US/09/893,348   TIME: 11:23:45

Input Set : **A:\EIS-SCHWARTZ2A.txt**
Output Set: **N:\CRF3\07242001\I893348.raw**

```
170 ctgctttcag agcctgtgac ttcttgtgtg cctctcctgt ttctcagcaa catggcatag     60
172 ggcctgggat accaggtctg gggatctcag ggactcttag cactttaaga cacatgtgtt    120
174 cccaggccct ggtgtgttcc tctagtgcca gaaagatgtt tcatgctttg ctgactttgt    180
176 ataaagtctg tttgtagctg ttttgacaga atctcagcgt ataactgagg gtgggggacat   240
178 tagccaagct gcattatagg aggacaaaac tgccatacaa agtgtccaaa atcattaagc    300
180 ctgcattttt attattggga gtaatatcaa acctcctatt ttccaatttt catttcttgt    360
182 cctgtgctag ctccatcctg tttggactgc tcctcccata tgtaaactaa gaagaatcaa    420
184 gcattctttg caacaaatac acacgatgct caaaaatgtc caggagcatc caatttccaa    480
186 agtttcctcc acctggaatg ctcttcatgc taaaatcctg tctgacaata ccagcatctc    540
188 tggcctgcac tcatcccttc ctggaactcc aagtgcattt accctctgtt accacttact    600
190 tggctgcctg aattgttagt tgaaaatatt aggtctactt agctaattct tcctcaggaa    660
192 attaaagact cccatatggc agagtctgtg tcttttctct cttcatatcc cgtataacac    720
194 ccagcataat gctgggcata tagtgagtat tccataaata gttgatgaat gactaaaata    780
196 agcaagcaaa caaacagact agaacaataa gaaagaaggg actggatttc ataatctctc    840
198 tggcttgcta tttgaattgc tgaattatta ttatttatta aatatttttt aaattctggc    900
200 aataaaaggt aaggatttat tttctttctt tcttttttt tttcttgaga cagagtctcg    960
202 ctcttactgc ccaggctgga gtacaatggc gcaatcttgg ctcacggcaa cctccgcctc   1020
204 ctcctgggtt taacagattc tcctgtctca gcctcctgag tagctgggat tacaggcata   1080
206 cgcccatgcc cggctaattt ttgtattttt agtagagacg gggtttttgcc atgttggcca  1140
208 ggctggtctt gaactcctga cctcatgtga tccacctgcc tcagcctccc aaagtgctgg   1200
210 gattacaggc atgcgccacc gtgcccggcc aaagatttat tttcaagaat gaaacaaagt   1260
212 aaggattctg ggtcaatctc acatgctgaa agccaaaacc tctagccgct cctgcttttt   1320
214 gacttcggag tgcccactat ctccgagcct gtgagcacag ggcctggcag aggggtttga   1380
216 gtggcatgag ctacctactg gatgtgcctg actgtttccc cttcttcttc cccaggcttg   1440
218 ttagagtgct gtgcaagatg tctggtaggg gcccccttg cttccctggt ggccactgga    1500
220 ttgtgtttct ttggggtggc actgttctgt ggctgtggac atgaagccct cactggcaca   1560
222 gaaaagctaa ttgagaccta tttctccaaa aactaccaag actatgagta tctcatcaat   1620
224 gtgtaagtac ctgccctccc acacagaccc atctttttt tccctctctc catcctggag    1680
226 atagagaact cttcagtacc ttagtaacta gcaggggact ggggtggagc cagaccggat   1740
228 tcccgagtct tccctctgtg ca                                           1762
231 <210> SEQ ID NO: 5
232 <211> LENGTH: 828
233 <212> TYPE: DNA
234 <213> ORGANISM: Homo sapiens
236 <400> SEQUENCE: 5
237 ctagaaaatc cctagccttg ttaaggtgct cgctctggtg tatacctcac ttatgtcggg     60
239 aaagaagcca ggtcttcaat taataagatt ccctggtctc gtttgtctac ctgttaatgc    120
241 aggatccatg ccttccagta tgtcatctat ggaactgcct ctttcttctt cctttatggg    180
243 gccctcctgc tggctgaggg cttctacacc accggcgcag tcaggcagat ctttggcgac    240
245 tacaagacca ccatctgcgg caagggcctg agcgcaacgg taacaggggg ccagaagggg   300
247 aggggttcca gaggccaaca tcaagctcat tctttggagc gggtgtgtca ttgtttggga    360
249 aaatggctag gacatcccga caaggtgatc atcctcagga ttttgtggca ataacaaggg    420
251 gtggggggaaa attgggcgcg agtctgtggc ctcgtcccca cccaaggctg ggtcctctct   480
253 aggggcctgg catttgagtg aggaagcgat ggctgcagcc gaacgagaag gtcaggaaga   540
255 acgtggtgcc cagctggctt agcctcacct ttcaaaggtt ccctaagcaa atttcttctc   600
257 aaaacagaaa gcatgagttt gtgggatgc tttgtacaat cagaccattt ctaagccatc    660
259 tgttggtatc cctttgttcc cttcctagta ggtaccacaa gagtggatct aactggacaa   720
261 gagtctaaaa tgctgctcat gtgattgaga cttgggcacc tgagctraga gggaggatgg   780
263 ataataaaaa ttaaataata actccaaggt aaatttacaa tgttctgg               828
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/893,348

Input Set : A:\EIS-SCHWARTZ2A.txt
Output Set: N:\CRF3\07242001\I893348.raw

```
266 <210> SEQ ID NO: 6
267 <211> LENGTH: 1140
268 <212> TYPE: DNA
269 <213> ORGANISM: Homo sapiens
271 <400> SEQUENCE: 6
272 gatcctcctc attcttcccc tacccattcc ccccaccctc cgttatactg gggccagtta    60
274 tctagtagat actgccaatt acccttggca gaggtgccct gctcactaat tttatttggg   120
276 ggagmgccct ggaacctggt tttaatgtct ggcacacgcc acttccagga tctcccagtt   180
278 tgtgtttcta catctgcagg ctgatgctga tttctaacca acccatgtca atcattttag   240
280 tttgtgggca tcacctatgc cctgaccgtt gtgtggctcc tggtgtttgc ctgctctgct   300
282 gtgcctgtgt acatttactt caacacctgg accacctgcc agtctattgc cttccccagc   360
284 aagacctctg ccagtatagg cagtctctgt gctgatgcca gaatgtatgg tgagttaggg   420
286 tacgggtgct ttggctctcc tacccactat ggaagcacta tatatttggt tattttctta   480
288 gtgtaaggag ggtggtgatt atgagaaaaa tataagatga tgaatgattg ggtcttagtt   540
290 tattaatcct tccctactga aaccagagag gtttcttccc ccggaaggga acttggaagt   600
292 ggtgggagtt ttcttggcca ttcacattgg cctactctag ttgactgctg ttcacaaccc   660
294 caaagcagca catttcaata acaaacacaa ggttdsacca ctgttcaata ccaccttctc   720
296 tttttttgtaa acctgtagaa aagaggatcc taattgttgg tagmatccaa mtttacagcc   780
298 aggataatta gagatggaag aagggctctg ggggaaagtc tccatgtggc cccgtaactc   840
300 cataaagctt accctgcttg cttttgtgt cttacttagg tgttctccca tggaatgctt   900
302 tccctggcaa ggtttgtggc tccaaccttc tgtccatctg caaaacagct gaggtgagtg   960
304 ggttatttgg gttattttac aagggagtag ctaataccat acaaattaca cccatggcct  1020
306 tcaattttaa ggactgaaag tttccctttg ctggattttg aattagccga ttgccttcta  1080
308 caacatgttg gctaagtgtg cctgagccaa tgagcataga aggtaaaaca cctctttct  1140
311 <210> SEQ ID NO: 7
312 <211> LENGTH: 295
313 <212> TYPE: DNA
314 <213> ORGANISM: Homo sapiens
316 <220> FEATURE:
317 <221> NAME/KEY: misc_feature
318 <222> LOCATION: (42)..(43)
319 <223> OTHER INFORMATION: n at positions 42 and 43 is unknown
322 <400> SEQUENCE: 7
323 aattagcaca cagaaaggat atccaacaca tacaaagctg tnntcatgga ctacactgga    60
325 gcatattact gctgttgcaa gaaacatttc ttcttcctct tttcatttc ctgcagttcc   120
327 aaatgacctt ccacctgttt attgctgcat ttgtggggc tgcagctaca ctggtttccc   180
329 tggtgagttg actttgaatg atcttggcaa gtaaataggc ctgagatagt tgtgggtaca   240
331 gctattctga aaggcaagaa ggtagactgc ttccatcctt gaaatgctgg aggga        295
334 <210> SEQ ID NO: 8
335 <211> LENGTH: 2940
336 <212> TYPE: DNA
337 <213> ORGANISM: Homo sapiens
339 <400> SEQUENCE: 8
340 aattctatat actatcacta tggctccact ttggatactc tccagtggat ttagttactc    60
342 atatggaaat acctgggagg acctcctaac attattagaa ttgttatgat tataatacaa   120
344 ygctatgtcc caggtcttgc tgatagtgct acagtgccct gtgaatgtag tgtgctcatt   180
346 gtgcagatta aaaacctaag gcactgaagg gtgaagtgat ttatctgaag ttattttata   240
348 aagcagtgat cagacaasct gagctcacag aactccctgg ccctactgc tgaggtttcc   300
350 atacagagtc aagtaatttc tcaccttgta aaacgaattg attcattaac caggggagag   360
```

```
352 ctctactgca tgatgtggct gtgtgtctac agcaagcacc ctatgactct aagtcactcg    420
354 gacatattga tgtggcaaag cccaaatatt gttcacttcc ctgaggaaaa ctcagtgcta    480
356 gatcaaacag aggtgtggaa taaatcttta tgatttgatt ctctgggcct gggccatgag    540
358 acccatgatg cctcagagac atcggacttc cagtcaagtg tatatggaga aagccaagcc    600
360 tgggatgtac tgcttttttgc agagcatggg ttttttccctt atttagttat gatttttattt    660
362 ctacccttcc tcattcccaa agggatttga ggagggagtg ctttctttc tactctcatt    720
364 cacattctct cttctgttcc ctacagctca ccttcatgat tgctgccact tacaactttg    780
366 ccgtccttaa actcatgggc cgaggcacca agttctgatc ccccgtagaa atccccctttt    840
368 ctctaatagc gaggctctaa ccacacagcc tacaatgctg cgtctcccat cttaactctt    900
370 tgcctttgcc accaactggc cctcttctta cttgatgagt gtaacaagaa aggagagtct    960
372 tgcagtgatt aaggtctctc tttggactct cccctcttat gtacctcttt tagtcatttt   1020
374 gcttcatagc tggttcctgc tagaaatggg aaatgcctaa taatatgact tcccaactgc   1080
376 aagtcacaaa ggaatggagg ctctaattga attttcaagc atctcctgag gatcagaaag   1140
378 taatttcttc tcaaagggta cttccactga tggaaacaaa gtggaaggaa agatgctcag   1200
380 gtacagagaa ggaatgtctt tggtcctctt gccatctata ggggccaaat atattctctt   1260
382 tggtgtacaa aatggaattc attctgcgtc tctctattac actgaagata gaagaaaaaa   1320
384 gaatgtcaga aaaacaataa gagcgtttgc ccaaatctgc ctattgcagc tgggagaagg   1380
386 gggtcaaagc aaggatcttt cacccacaga aagagagcac tgaccccgat ggcgatggac   1440
388 tactgaagcc ctaactcagc caaccttact tacagcataa gggagcgtag aatctgtgta   1500
390 gacgaagggg gcatctggcc ttacacctcg ttagggaaga gaaacagggt cttgtcagca   1560
392 tcttctcact cccttctcct tgataacagc taccatgaca accctgtggt ttccaaggag   1620
394 ctgagaatag aaggaaacta gcttacatga gaacagactg gcctgaggag cagcagttgc   1680
396 tggtggctaa tggtgtaacc tgagatggcc ctctggtaga cacaggatag ataactcttt   1740
398 ggatagcatg tctttttttc tgttaattag ttgtgtactc tggcctctgt catatcttca   1800
400 caatggtgct catttcatgg ggtattatcc attcagtcat cgtaggtgat ttgaaggtct   1860
402 tgatttgttt tagaatgatg cacatttcat gtattccagt ttgtttatta cttatttggg   1920
404 gttgcatcag aaatgtctgg agaataattc tttgattatg actgtttttt aaactaggaa   1980
406 aattggacat taagcatcac aaatgatatt aaaaattggc tagttgaatc tattgggatt   2040
408 ttctacaagt attctgcctt tgcagaaaca gatttggtga atttgaatct caatttgagt   2100
410 aatctgatcg ttctttctag ctaatggaaa atgattttac ttagcaatgt tatcttggtg   2160
412 tgttaagagt taggtttaac ataaaggtta ttttctcctg atatagatca cataacagaa   2220
414 tgcaccagtc atcagctatt cagttggtaa gcttccagtc atcagctatt cagttggtaa   2280
416 gcttcccagg aaaaaggaca ggcagaaaga gtttgagacc tgaatagctc ccagatttca   2340
418 gtcttttaat gttttttgtta actttgggtt aaaaaaaaaa aaagtctgat tggttttaat   2400
420 tgaaggaaag atttgtacta cagttctttt gttgtaaaga gttgtgttgt tcttttcccc   2460
422 caaagtggtt tcagcaatat ttaaggagat gtaagagctt tacaaaaaga cacttgatac   2520
424 ttgtttttcaa accagtatac aagataagct tccaggctgc atagaaggag gagagggaaa   2580
426 atgtttttgta agaaaccaat caagataaag gacagtgaag taatccgtac cttgtgttttt   2640
428 gttttgatttt aataacataa caaataacca accccttccct gaaaacctca catgcataca   2700
430 tacacatata tacacacaca aagagagtta atcaactgaa agtgttcctt catttctgat   2760
432 atagaattgc aatttttaaca cacataaagg ataaacttttt agaaacttat cttacaaagt   2820
434 gtatttttata aaattaaaga aaataaaatt aagaatgttc tcaatcaaac atcgtgtcct   2880
436 ttgagtgaat tgttctattt gacttcacaa tagaaactta ataatcgtac cttctcaaga   2940
439 <210> SEQ ID NO: 9
440 <211> LENGTH: 17538
441 <212> TYPE: DNA
442 <213> ORGANISM: Homo sapiens
444 <400> SEQUENCE: 9
445 atggaaatgt tctgtatttg tgttgtctga tgagataacc actaactgta gtgctattga     60
```

VERIFICATION SUMMARY
PATENT APPLICATION: **US/09/893,348**

DATE: 07/24/2001
TIME: 11:23:46

Input Set : **A:\EIS-SCHWARTZ2A.txt**
Output Set: **N:\CRF3\07242001\I893348.raw**

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7